without the assistance of the secretory nerves a hydremic condition led to an increase of the secretion, and sometimes to a distention and edema of the glands, and thought that these manifestations were entirely separate from the nervous system; he went further, and having paralyzed the chorda tympani by atropin, he still found that injection of saline was efficient in producing edema of the gland. Hamburger considered that there could be no salivary secretion without nervous excitation, and thought that the reason why solutions of certain salts caused salivation was by the eliminated salts impresssing the gustatory nerves. The authors think that gustatory excitation plays no part in the provocation of salivary secretion by the injection of salts, for after section or paralysis of the gustatory nerves, as well as after the injection of pure and distilled water, the salivation was obtained. They consider that the reactions of the submaxillary gland, either intact or deprived of its nerves, show that the secretion following transfusion of liquids into the blood is almost entirely under control of the central nervous system excited directly by the heightened blood-pressure. Such excitation they consider is transmitted by the chorda tympani. Compression of the abdominal aorta, which increases the pressure in the subdiaphragmatic region, has the same result, although less marked, as follows the injection of saline, especially in animals whose blood is already in a hydramic state.

Carrot-juice Agar as a Medium.—ROCHAIX (*Jour. de Physiol. et de Path. Gén.*, November 15, 1913, vol. xv. No. 6) finds that carrot-juice agar is an extremely useful medium for the growth of colon, typhoid, and paratyphoid of many sorts, of which it gives abundant cultures in twenty-four hours at 37°. It is equally applicable to Bacillus pyocyaneus, anthrax, Streptococcus pyogenes, and the encapsulated group, while, on the contrary, it is unfavorable to the development of staphylococcus, diphtheria, and pneumococcus. It is made as follows: carrots well washed are cut up and the juice expressed; 200 c.c. water is added to 800 c.c. of carrot juice, and agar is added, as in the preparation of ordinary peptone jelly, in the proportion of about 30 to 35 grams per 1000 c.c. The mixture is kept at 115° for twenty-five minutes in the autoclave; clarified with white of egg; alkalinized, and filtered. After being tubed it is sterilized again at 108° to 110°, after which the medium is more clear and transparent than the ordinary peptone jelly. The author has used also carrot juice, agar glycerinated, artichoke agar, potato agar, and beet-root agar, but finds that, everything considered, the first named is the best, for the reason that with simple economical preparation and absence of peptone it is yet possible to obtain luxuriant growths of the bacilli indicated, and very rapid growths of molds; while the production or absence of gas in the agar cultures is another differential characteristic which can be added to those already known as separating the colon-typhoid group from the encapsulated forms.

The Frequency of Tuberculosis.—LUBARSCH (*Virch. Arch.*, 213, 417) publishes autopsy figures which are authoritative from Posen, Zurckau, and Düsseldorf, showing that tuberculosis was present in 57.4 per cent. of 7371 cases, whereas it was found in 69.2 per cent. of 5800 adolescents.

Orth adds as a footnote that 51.4 per cent. was the figure for his own institute (1000 autopsies in Montreal gave a total tuberculosis figure of 43.7 per cent.). Since the figures for latent and healed tuberculosis were higher in adolescents than in all cases, the conclusion appears to be justified that the tendency to healing and to a harmless course is greater in the former. Further, in 1114 cases Lubarsch was able to determine a hematogenous source for 29 per cent.

Plasma Cells in the Kidney.—CEELEN (*Virch. Arch.*, 211, S. 276, 1913) has examined a series of 60 kidneys, mostly from the young, some from the newborn. His contention is that plasma cells are never found in the normal kidneys, and nearly always in the damaged organ, save perhaps in cases of simple hyperemia; in pyelonephritis they are likely to be especially prominent, and they may be so numerous in interstitial nephritis as to merit the statement that in primary interstitial nephritis (if one allow the term) there is a plasma-cell stage. The cells are found in the periphery of the veins and arteries and above the Malpighian bodies. They vary greatly in size and may be multinucleate. They are histiogenous, originating from the capillary endothelium, from adventitions cells, but probably not from hematogenous lymphocytes. They may give origin to smaller round, plasma daughter-cells. They may be found in the blood; they give us specific indication of disease, save that in the newborn they are characteristic of syphilis.

An Unusual Form of Meningeal Tuberculosis.—VON CZIRER (*Centralbl. f. allg. Path. u. path. Anat.*, Bd. xxv, No. 4, 28, February, 1914) describes a very unusual form of meningeal tuberculosis which occurred in a man aged twenty-five years; a flattened, outspread mass of pale reddish-gray color and 0.5 cm. thick lay over the convexity of the left hemisphere. It measured 8.5 by 5.7 cm., and broadened out over the posterior part of the frontal lobe and the front part of the parietal. Macroscopically it was judged to be a sarcoma, but its microscopic examination determined a tuberculous character, and the specific bacilli were found in the sections. It is very unusual to find a departure from the usual basal inflammation, and Czirer has found only two or three cases reported.

Market Butter.—In a study of the market butter of Boston by ROSENAU, FROST, and BRYANT (*Jour. Med. Res.*, March, 1914) there are one or two points of interest to the casual reader. All the specimens tested would be classed as good butter, and, it may be remarked in passing, passed the necessary standards. Twenty-five samples averaged five and a half million bacteria per gram, and the authors state that the bacteria diminish markedly with age of the butter in which they are contained. One sample diminished 85 per cent. in two weeks, two others over 90 per cent. in four and six weeks. Bacillus coli appeared occasionally, streptococci frequently, and B. welchii not at all, although this last is frequent in milk. Tubercle bacilli were found in two of twenty-one samples, which gives a figure corresponding closely to the number of milk samples similarly inspected. The authors consider that the cream used for butter should be pasteurized, the